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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte MICHAEL R. LAYTON, JOHN C. HOLLOWAY, MARK A.
COLLINS, and PATRICK J. PHIPPS

Appeal 2009-004340
Application 10/633,368
Technology Center 3600

Decided: November 19, 2009

Before: WILLIAM F. PATE, III, JENNIFER D. BAHR, and LINDA E.
HORNER, *Administrative Patent Judges.*

BAHR, *Administrative Patent Judge.*

DECISION ON APPEAL

STATEMENT OF THE CASE

Michael R. Layton, et al. (Appellants) appeal under 35 U.S.C. § 134 (2002) from the Examiner's decision rejecting claims 1, 2, 5, 7-12, 14, 17-25, and 32-35. Claims 4, 13, 15, 16, and 26-31 have been withdrawn from consideration. Claim 3 has been canceled. Claim 6 has been indicated allowable but objected to as depending from a rejected claim. We have jurisdiction over this appeal under 35 U.S.C. § 6 (2002).

The Invention

Appellants' claimed invention is directed to a shock-resistant enclosure. An elastomeric gasket and bumper structure 16 provides a seal between two sections of housing 11. Spec. 3:18-23. Bumpers 18, 19, 21, and 22 project from structure 16 to provide impact protection. *Id.* Further, mounting pads 31 extend from the base of housing 11, and are surrounded by shock-absorbing fenders 32. Spec. 4:23-27.

Claims 1, 10, 19, and 24, reproduced below, are illustrative of the claimed invention.

1. A shock-resistant enclosure, comprising a housing formed of rigid material to which a fragile element is rigidly mounted, and a plurality of discrete shock absorbing elements projecting outwardly in different directions from the housing for receiving impacts which would otherwise strike the housing from the outside, with at least some of the shock absorbing elements being formed integrally with the housing and of the same rigid material as the housing.

10. A shock-resistant enclosure, comprising a housing having base and cover sections, and a combined sealing gasket and shock absorbing

structure formed integrally of an elastomeric material with a generally planar sealing portion disposed between the base and cover sections of the housing and a plurality of discrete shock absorbing elements extending outwardly from the sealing portion and projecting from different sides of the housing, with at least one of the elements projecting from the housing in a direction substantially perpendicular to the plane of the sealing portion.

19. A shock-resistant enclosure, comprising a housing to which a fragile element is rigidly mounted, a mounting pad which projects from the housing, and a shock absorbing fender spaced laterally from the mounting pad, with a gap between the fender and the mounting pad, for receiving impacts which would otherwise strike the mounting pad.

24. A shock-resistant enclosure, comprising a housing to which a fragile element is rigidly mounted, and a plurality of leaf springs formed integrally with and extending outwardly from the housing for receiving impacts that would otherwise strike the housing.

The Rejections

The Examiner relies upon the following as evidence of unpatentability:

Berberich	US 5,760,998	Jun. 2, 1998
Bridges	US 6,498,719 B1	Dec. 24, 2002
Lelong	US 2003/0035271 A1	Feb. 20, 2003

Appellants seek review of the Examiner's rejections under 35 U.S.C. § 102(e) of claims 1, 5, 7-9, 19-21, 23, and 32-35 as anticipated by Bridges;

under 35 U.S.C. § 102(b) of claims 10-12, 14, 17, and 18 as anticipated by Berberich; and claims 24 and 25 as anticipated by Lelong; and under 35 U.S.C. § 103(a) of claim 2 as unpatentable over Bridges and Berberich; and claim 22 as unpatentable over Bridges.

SUMMARY OF DECISION

We AFFIRM-IN-PART.

ISSUES

Claim 1

The Examiner found that Bridges describes a laptop housing having various shock absorbers, including a protrusion projecting down from the bottom of the housing, and two lugs (legs) projecting outwardly from the sides of the housing. Ans. 3-4, 7-8. The dispositive issue with respect to claim 1 is whether Appellants have demonstrated that the Examiner erred in finding that Bridges' legs, which prop up the back side of the laptop, describe "discrete shock absorbing elements" that project in a "different direction[]" than the protrusion projecting down from the bottom of Bridges' laptop. See Appeal Br. 3-4; Reply Br. 1-2.

Claim 19

The Examiner found that Bridges describes a laptop having a protrusion from the housing, formed of a mounting pad covered by a fender portion of the housing. Ans. 3-4. The dispositive issue with respect to claim 19 is whether Appellants have demonstrated that the Examiner erred in finding that Bridges' mounting pad, completely covered by the fender

portion of the housing, describes a mounting pad that "projects from" the housing. *See* Appeal Br. 5; Reply Br. 4-5.

Claim 10

The Examiner found that Berberich describes a hard drive with an inner sealing gasket between the cover and base of the hard drive's housing, and with bumper feet projecting from the housing. Ans. 4-5, 12-13. The dispositive issue with respect to claim 10 is whether Appellants have demonstrated that the Examiner erred in finding that Berberich's bumper feet describe discrete shock absorbing elements "formed integrally" with the sealing gasket. *See* Appeal Br. 6-7; Reply Br. 5-6.

Claim 24

The Examiner found that Lelong describes a hard-drive housing that rigidly mounts a hard drive, and leaf springs that project from one side of the housing. Ans. 5-6, 13. The dispositive issue with respect to claim 19 is whether Appellants have demonstrated that the Examiner erred in finding that Lelong's hard drive is "rigidly mounted" and that the leaf springs "extend[] outwardly" from the housing. *See* Appeal Br. 8; Reply Br. 7.

Appellants do not make additional arguments for dependent claim 25, such that claim 25 stands or falls with claim 24. 37 C.F.R. § 41.37(c)(1)(vii) (2007).

FACTS PERTINENT TO THE ISSUES
(FINDINGS-OF-FACT (FF))

- FF1 The Examiner correctly found that Bridges describes shock-absorbing pads 24, a shock-absorbing mounting pad 32 ("recess" of second protrusion 26), and a shock-absorbing fender 22 ("first protrusion") projecting from the bottom wall 20 of the laptop housing 10. Ans. 3; *see also* Bridges, col. 3, ll. 2-6, 10-11, 14-20, 32-35.
- FF2 The Examiner found that Bridges describes "lugs" (unlabeled in fig. 2 of Bridges, but labeled by the Examiner in the portion of fig. 2 reproduced on page 4 of the Answer) formed integrally with the housing 10 that extend beyond a side of the housing 10. Ans. 4, 7-8. The Examiner found that these lugs are shock absorbers. Ans. 7; *but see* FF4 (finding that Bridges does not describe the lugs as shock absorbing, or otherwise support the Examiner's finding that they are shock absorbers).
- FF3 One of ordinary skill would understand that the "lugs" in Bridges are legs that pivotally rotate into a position that elevates the back side of the keyboard section of the computer. *See* Appeal Br. 5; Reply Br. 1.
- FF4 Bridges' specification does not explicitly describe the legs, which are solely depicted in figure 2. The Examiner has not pointed to, and we do not find, any disclosure in Bridges that indicates, or fairly suggests, that the rotatable legs depicted in figure 2 are in any way adapted to absorb shock, such that one of ordinary skill in the art would characterize them as shock absorbing elements.
- FF5 The Examiner found that Berberich describes an elastomeric, integrally formed gasket (frame 82 and gasket seal 44 of bumper and

- gasket assembly 40) and shock-absorbing structure (end caps 86, bumpers 80, and bumper 42). Ans. 4-5; *but see* FF7 (finding that Berberich does not, in fact, describe that the gasket 44 and bumpers 80 are integrally formed or that the frame 82 is elastomeric).
- FF6 Berberich describes that the elastomeric bumpers 80 of the second embodiment (figures 10-13) could be included in the disk drive of the first embodiment (figures 1-9) and that many of the internal components of the disk drive in figures 1 and 2 would be included in the disk drive of the second embodiment. Col. 10, ll. 53-56, col. 9, ll. 34-40. Berberich does not describe, however, which internal components from figures 1 and 2 would be included in the disk drive of the second embodiment.
- FF7 Berberich describes bumpers 80, end caps 86, and bumpers 88 as elastomeric shock absorbers. Col. 9, ll. 45, 50-53, col. 10, ll. 8-11. Further, Berberich describes bumper 88 as absorbing shocks transferred to the frame 82 by way of the connector shroud 84. Col. 10, ll. 17-29, fig. 12. As such, Berberich does not describe that frame 82 is made of an elastomeric material, but as a material that needs an elastomeric material (bumpers 88) to dissipate the shocks delivered to it.
- FF8 Berberich describes bumpers 80 as pivotally mounted on frame 82, to allow the bumpers 80 to rotate such that they project above and below the disk drive. Col. 9, ll. 46-50, figs. 13A-D. Berberich does not describe the bumpers 80 as being integrally formed with frame 82 or gasket 40. To the contrary, the pivotal mounting arrangement of the bumpers 80, as shown in figures 13A-D, implies that the bumpers 80

- likely are not formed integrally with another, stationary material, such as frame 82 or gasket 40.
- FF9 The Examiner found that Bridges describes a shock-absorbing fender 22 ("first protrusion") and a mounting pad 32 ("recess" of second protrusion 26) that extend beyond a surface of the mounting pad 32. Ans. 3-4; *but see* FF10.
- FF10 Bridges describes that the laptop housing 10 includes a base enclosure 12 for holding the computer components, the bottom of base enclosure 12 made of a support wall 20. Col. 2, ll. 54-55, col. 3, l. 1, col. 4, ll. 23-26, fig. 2. A first protrusion 22 is formed from the support wall 20 and projects downwardly from the wall 20. Col. 3, ll. 10-11, fig. 3. A second protrusion 26 is formed from metal layer 30, which is covered by bottom wall 20. Col. 3, ll. 15-20, fig. 3. Thus, the second protrusion 26 is located within the laptop housing 10, such that the second protrusion 26 does not "project from" the housing 10.
- FF11 The Examiner correctly found that Lelong describes a hard drive (HDD 12) rigidly mounted to a housing (cage 10). Ans. 5; *see also* Lelong, para. 0066 ("[t]o ensure ... that the HDD's [sic.] are secured against lateral movement, the keepers ... "clamp" the HDD rails firmly against the cage 10").
- FF12 The Examiner correctly found that Lelong describes that leaf springs 38 extend outwardly from one side of housing 10. Ans. 5; *see also* Lelong, para. 0065 ("each leaf spring 38 is provided with a somewhat rearwardly folded distal end"), fig. 7 (depicting that "rearwardly" means that the leaf spring ends extend away from cage 10).

PRINCIPLES OF LAW

To establish anticipation, every element and limitation of the claimed invention must be found in a single prior art reference, arranged as in the claim. *Karsten Mfg. Corp. v. Cleveland Golf Co.*, 242 F.3d 1376, 1383 (Fed. Cir. 2001).

ANALYSIS

Claim 1

The Examiner found that Bridges describes a laptop housing with shock-absorbing pads 24, a shock-absorbing mounting pad 32, and a shock-absorbing fender 22, all projecting downward from the bottom of the housing. FF1. Further, the Examiner found that Bridges describes shock-absorbing "lugs" that extend beyond the sides of the housing, and thus in directions different from the other shock absorbers. FF2.

Appellants argue that the lugs, feet, mounting pad, and fender identified by the Examiner all project down from the housing, not in different directions, and that the lugs are rigid supporting legs that are not shock absorbing. Reply Br. 1-2; Appeal Br. 5.

The legs that the Examiner characterizes as "lugs" pivot such that they necessarily project from the housing in many directions along the path of their rotation, not just down. FF3. Therefore, the legs project outwardly in different directions than the other shock-absorbing elements.

The Examiner does not provide any basis in reasoning and/or fact to support the position that the legs are shock absorbing. The only description of the legs in Bridges is their depiction in figure 2. FF4. Bridges depicts several components as having shock-absorbing qualities (FF1) and describes

these objects in detail, but does not depict or describe the legs as having similar characteristics. The Examiner has not pointed to, and we do not find, any disclosure in Bridges that indicates, or fairly suggests, that the rotatable legs depicted in figure 2 are in any way adapted to absorb shock, such that one of ordinary skill in the art would characterize them as shock absorbing elements. Therefore, given that Bridges explicitly describes some structures as shock absorbing, but provides no such description of the legs (or “lugs”), Bridges simply does not support the Examiner’s finding that the legs are shock absorbing elements, as called for in claim 1.

Claim 19

The Examiner found that Bridges describes a mounting pad (second protrusion 26 with recess 32) that projects from a housing 10. FF9. Appellants argue that the mounting pad cannot project from the housing because the housing completely encloses the mounting pad. Appeal Br. 5.

The laptop housing 10 houses the computer components in base enclosure 12. FF10. The first protrusion 22 is formed from support wall 20, which is the bottom side of enclosure 12. *Id.* As such, the first protrusion 22 is a part of the housing 10. *Id.* Therefore, the mounting pad (second protrusion 26 and recess 32) does not project *from* the housing 10 because the mounting pad is contained *within* the housing 10 by way of first protrusion 22. *Id.*

Claim 10

The Examiner found that Berberich describes an elastomeric, integrally formed gasket (frame 82) and shock-absorbing structure (end caps

86, bumpers 80, and bumper 42). FF5. Appellants argue that the bumpers 80 are not integrally formed with the gasket assembly 40, and that the "gasket" 82 identified by the Examiner is not elastomeric or disposed between the base and cover sections. Reply Br. 5-6; Appeal Br. 7.

Frame 82 is not made of an elastomeric material because several explicitly elastomeric materials are attached to frame 82 for the purpose of absorbing shocks transmitted through the frame 82. FF7. The elastomeric bumpers 88, for example, seemingly would be redundant if frame 82 were also elastomeric. *See* FF7.

The Examiner additionally found that "runners" (gasket 44 of the first embodiment) integrally connect the bumpers 80 of the second embodiment to the sealing portion. FF5. Appellants point out that although the bumpers 80 of the second embodiment could be included in the first embodiment shown in figures 1-9, Berberich does not describe that the bumpers 80 are formed integrally with the gasket 44. Reply Br. 5-6; FF6.

As shown in figures 13A - 13D, the elastomeric bumpers 80 are pivotally mounted to non-elastomeric frame 82. FF8, FF7. Therefore, regardless of which internal components of the first embodiment of figures 1-9 are included in the second embodiment of figures 10-13 (*see* FF6), Berberich does not describe the bumpers 80 as being integrally formed with frame 82 or gasket 40. FF8. To the contrary, the pivotal mounting arrangement of the bumpers 80, as shown in figures 13A-D, implies that the bumpers 80 likely are not formed integrally with another, stationary material, such as frame 82 or gasket 40. FF8; FF7.

Claim 24

The Examiner found that Lelong describes a hard drive rigidly mounted to a housing (cage 10). FF11. The Examiner also found that Lelong describes leaf springs that extend outwardly from one side of the housing. FF12. Appellants argue that the hard drive is not rigidly mounted to the housing because grommets 18 are positioned between the hard drive and the housing cage. Appeal Br. 8; Reply Br. 7; *see* Lelong, para. 0060 ("[i]n order to minimise [sic.] any transmission of vibrations between the HDD 12 and the cage 10, a grommet 18 is provided between the two"). Appellants further argue that the leaf springs extend inwardly to bear against the hard drive, not outwardly from the housing. Appeal Br. 8; Reply Br. 7.

While grommet 18 may be provided between the hard drive and the housing cage at one end, the hard drive is clamped "firmly" against the housing cage by transverse biasing elements 41 and 42, thus providing a rigid mounting to the housing in at least the transverse direction. FF11. In addition, while leaf springs 38 bear inwardly upon the hard drives, each leaf spring 38 is "provided with a somewhat rearwardly folded distal end" that projects outwardly from the housing. FF12. As such, an object moving toward the housing will impact this rearwardly folded distal end before the object impacts the housing itself. *Id.*

CONCLUSIONS

Claims 1, 2, 5, 7-9, and 32-35

Appellants have demonstrated that the Examiner erred in finding that the keyboard-elevating legs in Bridges are a shock-absorbing element.

Therefore, Appellants have demonstrated error in the Examiner's rejection of claim 1, and dependent claims 5, 7-9, and 32-35.

Inasmuch as the Examiner's rejection of claim 2 as unpatentable over Bridges and Berberich is grounded on the same unsupported finding that the legs (or "lugs") of Bridges are shock-absorbing elements, Appellants likewise have demonstrated error in the rejection of claim 2.

Claims 10-12, 14, 17, and 18

Appellants have demonstrated that the Examiner erred in determining that the bumpers 80 in Berberich are "formed integrally" with a gasket seal. Therefore, Appellants have demonstrated error in the Examiner's rejection of claim 10, and dependent claims 11, 12, 14, 17, and 18.

Claims 19-23

Appellants have demonstrated that the Examiner erred in determining that the mounting pad in Bridges "projects from" the housing. Therefore, Appellants have demonstrated error in the Examiner's rejection of claims 19, and dependent claims 20, 21, and 23.

Inasmuch as the Examiner's rejection of claim 22 as unpatentable over Bridges is grounded on the same unsupported finding that the mounting pad in Bridges "projects from" the housing, Appellants likewise have demonstrated error in the rejection of claim 22.

Claims 24 and 25

Appellants have failed to demonstrate that the Examiner erred in determining that the hard drive in Lelong is "rigidly mounted" to the

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housing, and that the leaf springs in Lelong "extend outwardly" from the housing. Therefore, Appellants have failed to demonstrate error in the Examiner's rejection of claim 24, and dependent claim 25, which falls with claim 24.

DECISION

The Examiner's decision is affirmed as to claims 24 and 25. The Examiner's decision is reversed as to claims 1, 2, 5, 7-12, 14, 17-23, and 32-35.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv) (2007).

AFFIRMED-IN-PART

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